

Chemistry Librarians Survey

Feb 12, 2024

46 responses & French/English translations

Question 1

Chemistry Librarianship – How do you measure up? Survey Consent Form

Bibliothécaires en chimie – Où vous situez-vous? Formulaire de consentement au sondage

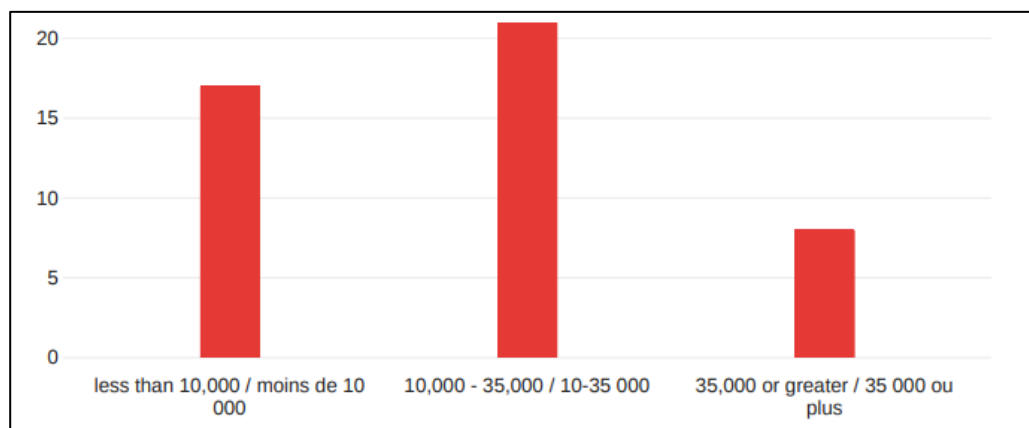
With full knowledge of all foregoing, having read the information presented, of my own free will, I agree to participate in this study. / En pleine connaissance de tout ce qui précède, après avoir lu les renseignements présentés, de mon plein gré, j'accepte de participer à ce sondage.

Question 2

What is the size of your institution using the number of full-time equivalency students? / Quelle est la taille de votre établissement en matière du nombre d'étudiants en équivalence temps plein ?

46 responses

< 10,000, 13; 10-35, 21; >35,000, 8

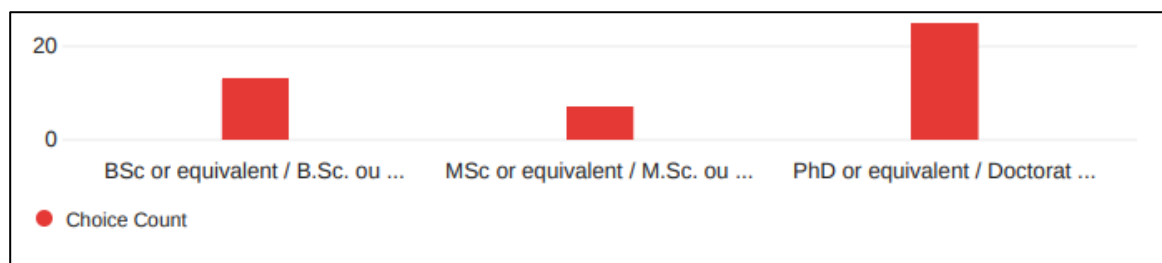


Question 3

What is your institution's highest chemistry degree? / Quel est le diplôme de chimie le plus élevé de votre établissement ?

45 responses

BSc, 13; MSc, 7; PhD, 25



Question 4

What is your current job title? / Quel est votre titre actuel ?

20 responses

Bibliothecaire / Librarian (4)

Bibliothecaire-conseil / Librarian-consultant

Science Research Liaison Librarian

STEM Research Librarian

Chemistry Librarian

Collections Librarian (2)

Teaching & Learning Librarian, OER & STEM

Systems Librarian (2)

Science & Engineering Librarian

Manager, Library Services

Librarian Emeritus

Research and Teaching Librarian

Head, Collections Strategies

Science Liaison Librarian

Instruction Librarian

Question 5

How many years of service do you have as an academic librarian supporting chemistry? / Combien d'années de service avez-vous en tant que bibliothécaire universitaire dans le domaine de la chimie

20 responses

.25, 1, 1, 1, 2, 2, 3, 7, 8, 9, 10, 10, 12, 12, 14, 15, 21, 25, 25, 32

$157.25 / 20 \times 100\% = 7.86$ average 10 mean

Question 6

What are your responsibilities in addition to your role as chemistry librarian? / Quelles sont vos responsabilités en plus de votre rôle de bibliothécaire en chimie ?

21 responses

Responsable du depot institutionnel, soutien a la recherche, formation. / Responsible for the institutional repository, research support, training.

Je suis attitre egalemt aux departements de genie chimique, physique, genie physique, optique et genie alimentaire. / I am also assigned to the departments of chemical engineering, physics, engineering physics, optics and food engineering.

Soutien a la recherche d'information en chimie et a l'utiisation des outils d'information pertinents au domaine. / Support for the search for information in chemistry and the use of information tools relevant to the field.

Responsable de la Cartotheque. Bibliothecaire desciplaire (genie, biologie, geographie, mathematiques, informatique, biochimie, physique, science forensique). Substitut pour les analyses bibliometriques. / Responsible for the Map library. Disciplinary librarian (engineering, biology, geography, mathematics, computer science, biochemistry, physics, forensic science). Substitute for bibliometric analyses.

Additional liaison areas in Environmental Science, Environmental Studies, I am responsible for several other liaison subjects/disciplines. I am one of two academic integrity coordinators for our campus. I am also one of the main contacts for the public facing side of the discovery layer here. Teaching, reference. That's all on my mind.

Also, liaison for biomolecular sciences, biology, environmental science, physics, computer science, electrical engineering, chemical and biological engineering.

As suggested by my job title, everything I do revolves around my role as a chemistry librarian. However, I think it's important to add that I oversee all operations of our university's standalone Chemistry Library as a solo librarian, so I have a lot of space-related and administrative responsibilities in addition to my work as a subject librarian.

Collections, acquisitions, research help, teaching.

Instruction and research support for students in Science and Engineering, support for OER initiative across campus.

Head of acquisitions, cataloguing, and collections. Liaison librarian to five other science departments and Business.

I am a liaison librarian for Science. My role is Systems and Cataloguing librarian.

Collection development, research data management support, benchmarking (Scival, Web of Science)

I manage e-resources for all students and for Chemistry, manage SciFinder, and chemistry e-journal subscriptions. I rely on chem faculty to assist with collection development.

Chemistry librarian take up a very small part of my time – I'm a Systems Librarian.

Chemistry outreach.

Supporting other programs, scholarly communication, electronic resources management.

I am also liaison librarian for Anthropology, Biology, Child and Family Studies, Computer Science, Criminal Justice, Education, Environmental Studies, Geography, Indigenous Studies, Math, Nursing, Physical and Health Education, Psychology, Religions and Cultures, Social Welfare and Social Development, Social Work, Sociology, I do instruction, reference, collection development, etc.

Unit head, other collection areas.

I am also the librarian for Biochemistry, Physics (including Astronomy), Computer Science, Mathematics, Data Science, and the multidisciplinary program of Water Science & Environmental Health.

Information literacy, collections, and service as part of a functional team. I am responsible for several STEM physical sciences liaison subjects as well.

Additional liaison areas in Environmental Science, Environmental Studies, Physics, Psychology, and Neuroscience; I also have functional activities around user experience (UX) research in the library.

Question 7

What are your academic degrees, in addition to your MLIS/MLS/LIS/MI library/information degree? /
Quels sont vos diplômes universitaires, en plus de votre diplôme MSI/MBSI en bibliothéconomie et
sciences de l'information ?

13 responses: BSc (10), B Eng (1), MSc (6), BA or MA (3)

Baccalaureate en biologie et maitrise en ressources renouvelables. / Bachelor's degree in biology and
master's degree in renewable resources.

Baccalaureat et maitrise en biologie. / Bachelor's and master's degrees in biology.

Baccalaureate n geographie. Maitrise en environnement. Microprogramme de 2eme cycle en
enseignement post-secondaire. / Bachelor's degree in geography. Master's degree in environment.
Graduate microprogram in post-secondary education.

I have a BSc (Hons) in Biology and an MSc in Environmental Science.

B. Eng. (civil)

BA in English literature in Writing & Master of Information (LIS concentration)

BSc

BSc (Physics)

BSc, Bachelor of Education.

BSc Metallurgy

BSc, BA

BA History, library technician with 40+ years of academic librarianship experience

BSc – Biology

BSc and MSc Chemistry

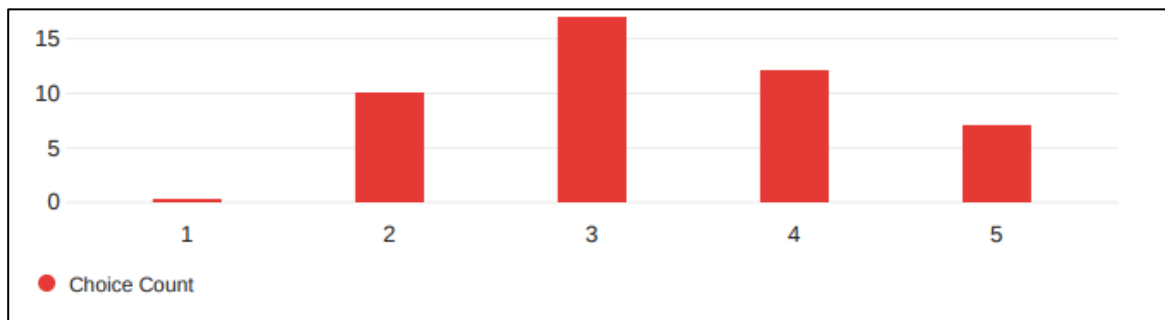
BA, MA History – no real science background

Bachelor of Arts (Honours) in Experimental Psychology

Question 8

How confident are you in your ability to provide library support for chemistry education, on a scale of 1 to 5 with 5 being most confident? / Sur une échelle de 1 à 5, 5 étant la note la plus élevée, quel est votre degré de confiance dans votre capacité à fournir un soutien bibliothécaire à l'enseignement de la chimie ?

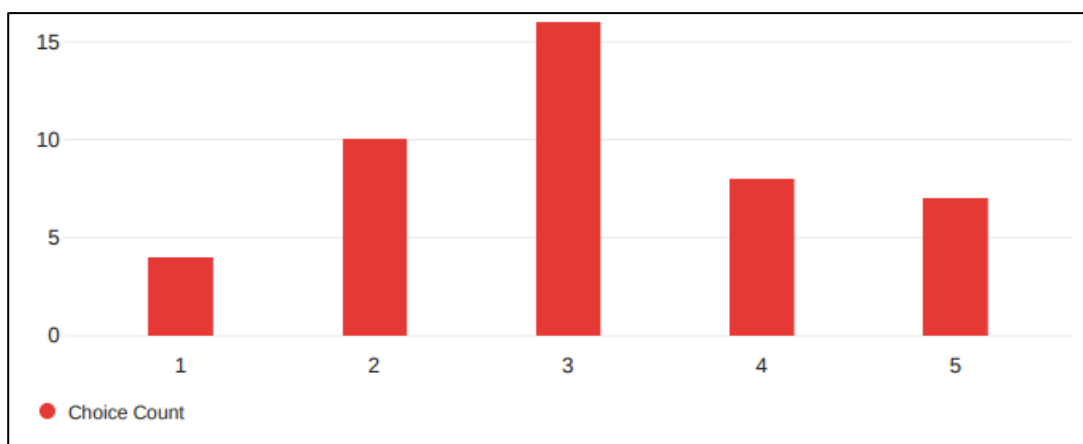
46 responses: 1, 0; 2, 10; 3, 17; 4, 12; 5, 7



Question 9

How confident are you in your ability to provide library support for chemistry research, on a scale of 1 to 5 with 5 being most confident? / Sur une échelle de 1 à 5, 5 étant la note la plus élevée, quel est votre degré de confiance dans votre capacité à fournir un soutien bibliothécaire à la recherche en chimie ?

45 responses: 1, 4; 2, 10; 3, 16; 4, 8; 5, 7



Question 10

Please describe how your academic background and professional experience help you support chemistry education and research. / Veuillez décrire comment votre formation universitaire et votre expérience professionnelle vous aident à soutenir l'enseignement et la recherche en chimie.

23 responses

Durant ma formation en biologie, j'ai eu des cours en chimie qui m'ont permis d'acquérir une base de connaissances dans le domaine. Par contre, les notions sont parfois lointaines dans ma mémoire. / During my training in biology, I took courses in chemistry which allowed me to acquire a base of knowledge in the field. On the other hand, the notions are sometimes distant in my memory.

Je travaille dans le service aux usagers depuis longtemps. Dans mon parcours professionnel, j'ai travaillé avec des élus, des gestionnaires, des étudiants. / I have worked in user services for a long time. In my professional career, I have worked with elected officials, managers, and students.

Mon offre de service est développée en prenant en considération les besoins et les intérêts de ma clientèle, donc, j'essaie d'être à jour dans tous les aspects qui touchent la recherche, la publication savante, la gestion de données de recherche, etc. / My service offering is developed taking into consideration the needs and interests of my clientele; therefore, I try to be up to date in all aspects relating to research, scholarly publishing, research data management, etc.

Dans le cadre de mon baccalauréat en biologie, nous avons quelques cours de base en chimie. / As part of my bachelor's degree in biology, we had some basic courses in chemistry.

Avant d'être bibliothécaire en chimie, j'ai été pendant 5 ans bibliothécaire en sciences et génie dans une autre université. Même si ce n'était pas en chimie spécifiquement, beaucoup de questions et de consultations pouvaient porter sur des domaines en lien avec la chimie. Je donnais aussi beaucoup de formations documentaires aux étudiants des cycles supérieurs dans tous les domaines du génie, incluant le génie chimique. J'ai donc développé des connaissances en sciences et génie et je connais le langage scientifique apparenté à ce qui prévaut dans le domaine de la chimie. / Before becoming a chemistry librarian, I was a science and engineering librarian at another university for 5 years. Even if it was not specifically in chemistry, many of the questions and consultations could relate to areas related to chemistry. I also gave a lot of documentation training to graduate students in all fields of engineering, including chemical engineering. I have therefore developed knowledge in science and engineering, and I know the scientific language related to what prevails in the field of chemistry.

I previously served as a Biological Sciences liaison for approximately 6 years, which has adjacent expertise to Chemistry and partially helped me transition into the role.

I studied general and organic chemistry as a student. During my master's degree I did some course work in toxicology. I have been doing chemistry information literacy for 15 years and have some great relationships with faculty here.

I have baseline first year chemistry knowledge. Otherwise, I have experience working with engineering students and health science students. I'm very new to supporting chemistry and supporting it among other disciplines, so to be honest, I haven't yet identified its unique needs, and what sets it apart from other STEM disciplines that I serve.

Prior to working as a chemistry librarian, I received training and professional experience working in health libraries. This helped me gain an understanding of issues in STEM librarianship, many of which I've found to be transferable to different areas of the sciences. I consider myself well-versed in the specific needs and concerns of STEM researchers around topics like scholarly publishing, research data management, collections development, literature searching, etc. though I did have to do a lot of extra work to gain chemistry-specific knowledge when I first began my role. For example, I audited multiple introductory chemistry courses to develop base-level knowledge and vocabulary and spent a lot of time learning how chemical information is structured, especially in specialized databases like SciFinder and Reaxys, which were quite different than other STEM databases I'd encountered. The skills and knowledge I bring from my humanities background is valued in my department: I am often called upon to share my expertise in writing and communication with students and faculty. However, I do think many aspects of my role would be easier (specially building relationships and trust with faculty and students) if I had an academic background in chemistry, and I would feel more confident in my ability to provide teaching and research support.

While I don't feel terribly confident in my chem abilities, I've at least taken chemistry as an undergrad (4 courses) and multiple science labs. None of my colleagues have science degrees – all are BSs, Mas – all arts or social science related. Librarianship desperately needs more STEM professionals in the field. I regularly use chem resources like SciFinder Scholar, ACS, RSC so am comfortable helping researchers access these resources.

My undergraduate coursework and undergraduate research experience include a lot of physics and math which means that I feel comfortable in talking about some areas of chemistry research (e.g. physical chemistry) but less comfortable in others (e.g. organic chemistry). I have 5 years' experience supporting engineering, math, and computer science, and so I have a good understanding of some of the databases and resources related to these areas, but I do not have the same experience with the more specialized chemistry databases.

My science degree, although not in Chemistry, provides a level of familiarity/comfort with the subject that other librarians at my institution did not have. As with other liaison assignment, I have to become familiar with topics being taught and library resources that can support those topics and meet with faculty.

I don't have much background in chemistry. My professional experience is more computer science related.

Basic inorganic chemistry during undergrad, extensive liaison experience working with faculty, graduate and undergraduate students in chemistry, chemical engineering, and materials engineering.

I work closely with chem faculty and lab techs. Our information librarian works with senior chemistry students to learn research skills and citing.

The rest of the librarians are arts majors.

My university education was in chemistry and then I worked for a gov org as a science librarian for 15 years before moving to academia. Those experiences gave me a wide view of how chemistry fits in the natural and physical sciences which helps me support chem ed and research.

I do not feel confident in this area, but Chemistry program at my institution is small and undergraduate only, so it is not a large part of my work.

I have been a librarian at the institution for over 20 years, so I know the resources we have quite well and can provide adequate support. We do not have in the way of specialized databases for Chemistry but what we have seems to provide enough support for the program.

My professional experience has provided some familiarity with the tools that are available for chemistry education and research, while my academic background (Canadian history) reinforces how little I know about the use and application of these tools.

I have relatively good understanding of the Chemistry library users' academic culture, and information and scholarly communication needs.

No real chemistry background, I hesitate to become fully engaged in instruction and support as I don't really speak chemistry very well, and am trying to pick this up, but there are very few ways to get chemistry expertise without getting additional certification e.g. BSc, this just doesn't happen overnight. I suffer from the imposter syndrome from time to time and wonder whether faculty, staff and students hesitate to ask for assistance... but I do the best I can with what I know and experience.

I am familiar with different databases and general search strategies used for locating chemistry research but not at an advanced level.

Question 11

How do you use artificial intelligence in your instruction and professional practice? / Comment utilisez-vous l'intelligence artificielle dans votre enseignement et dans vos activités professionnelles ?

21 responses

Rarement. Lorsque je l'utilise, c'est pour m'aider a creer des exemples de recherches disiplinaires. / Rarely. When I use it, it is to help me create examples of disciplinary research.

J'utilise pour faire du brainstorming, afin d'ameliorer mon offer de services, pout developper des quiz, etc. / I use it for brainstorming, to improve my service offering, to develop quizzes, etc.

Je l'utilise rarement. L'AI est parfois utile pour m'aider a inventer des exemples de problemes specifiques a un domaine lors de mes formations. / I rarely use it. AI is sometimes useful to help me invent examples of domain-specific problems for my training.

Nous ne l'utilisons pas encore. Par contre, des discussions son ten cours dans des comites interuniversitaires pour etudier les opportunités et les risques lies a l'intelligence artificielle dans un context universitaire. Je mn'attends a ce qu'il y des developpements a cet effet au cours prochaines annees. / We don't use it yet. On the other hand, discussions are underway in inter-university committees to study the opportunities and risks linked to artificial intelligence in a university context. I expect there to be developments in this regard over the next few years.

I have yet to truly dive into AI but plan to very soon.

I use ChatGPT to compare discipline-specific terminology to help orient me to “lingo”. I rely on it to give me the big picture. I also go to ChatCPT to suggest synonyms for search strategies (this idea given to me by a PhD student I work with).

One thing I've tried using LLMs for is to brainstorm search examples for my instruction as well as generating sample lesson plans – since I do not have a chemistry background, I sometimes find it challenging and time-intensive to identify relevant examples that do a good job of illustrating different search strategies. I have had limited success with this so far, but will keep exploring. I am also increasingly being asked to speak about these tools as part of my instruction sessions.

I have not yet...

I'm starting to talk about some of the research tools that use generative AI (e.g. scite, Elicit, etc.) in some of my classes, when appropriate. I am part of a team that is starting to offer workshops on these same tools as well.

Occasionally.

As of yet, I don't use AI.

At this point, sparingly.

In ways, I'm not aware of using it.

I don't.

Not much yet.

Minimally at this point.

I have not yet incorporated AI into instruction or professional practice.

I have not used AI in my instruction. I have only used AI for various brainstorming exercises in my professional practice.

AI is the next wave, I use it when pointing to students to gain this knowledge and use it myself to work through textual analysis and writing up briefs. I don't think that AI will change what we do when instructing in the sciences as students still need to think critically on what they do, what they find and how best to evaluate whether their research question is being answered. There is so much more to academic research, but I see AI helping database searching, harvesting data and citations from a wider swath of sources to include languages that are not really known e.g. Asian, sources that are suspect e.g. regional and lesser known journals and to hear the voices of important communities e.g. Indigenous. The future looks bright as AI is the research resource du jour. I point to the opportunities and possibilities AI brings to research if only to widen the knowledge and curiosity of graduate students in instruction and meeting research goals.

I haven't yet.

I don't currently employ AI in my current instruction and professional practice, but may consider incorporating aspects of it in future.

Question 12

Any further comments concerning this study that you would like to share? / Avez-vous d'autres commentaires à formuler sur cette étude?

20 responses

Des formations sur SciFinder et ChemDraw seraient utiles pour parfaire mes connaissances et mieux accompagner les personnes étudiant ou faisant de la recherche en chimie. / Training on SciFinder and ChemDraw would be useful to perfect my knowledge and better engage people studying or doing research in chemistry.

Aucun commentaire particulier. / No particular comments.

No, thank you.

No.

[Institutional name] is a small place. I am stretched very thin, I'm not so much the Chemistry Librarian as the librarian the Chemistry Department should contact when they need help from the librarian. I just don't have time to do any more than that.

No, thank you.

One time I was showing a class ChemDraw and the prof was like 'just draw hydrogen' and I was like... yeah I don't know how to do that! Hahaha, I literally only could draw what I came up with in my example, I'm no chemist!

I've been a STEM librarian for 30+ years. The main obstacle I have encountered in my career is not my lack of a formal STEM education, but the attitudes of many of the scientists and engineers I have worked with. Among STEM researchers there is a deep lack of understanding about librarians and librarianship, and their role in STEM education. Many STEM researchers hold the library in little regard. About 10 years ago, I introduced myself to a new chemistry professor who moved to my university after working for 20 years at other institutions. One of the first things he said to me was that when he was a grad student, he NEVER used the library. It was a brief conversation. In the first few years as a chemistry librarian, when I attended department seminars, some of the older faculty would say things like, "Oh, I'm surprised to see you here." Of course, there are some STEM researchers who are big fans of the library. But as I get older, the number grows smaller. For many researchers today, the library is very distant, almost [an] invisible thing.

As someone who has worked in multiple areas of STEM librarianship without an academic background in STEM, I found it much more challenging to get up to speed with chemistry as a liaison area than I did with the health sciences. I absolutely think that it is possible to be a successful chemistry librarian without an academic background in chemistry, but it requires significant time, effort, and commitment to develop confidence and expertise in providing robust research and curriculum support.

No.

I work in a small university. Everyday is an exercise in triage. My main job for the chemistry department is helping students get registered on SciFinder and keeping up to date on that. I update the LibGuide every do often. It's the best I can do.

No.

Thanks for this. Good luck with this research.

I think there are ways to use AI in teaching and research but I have not explored these to this point.

It is great that you are asking people if they use AI in heir professional practice. I am also wondering about this. I look forward to seeing examples and practices from your research findings.

I would be interested in more training for Chemistry Librarians but I haven't spent time looking into this. I am also interested in the results of this survey.

Nope.

A great study, I think too many academic librarians fail to realize that subject expertise is everything when building trust, capacity and share research skills to new and experienced researchers. Without this knowledge librarians serving in STEM and chemistry research areas are too often sidelined or ignored at their peril.

I am very interested in seeing how chemistry librarians have specific training/academic backgrounds in chemistry. I would also like to see the variety of roles that chemistry librarians across the country have taken on.

I would be interested in the differences experienced between a dedicated chemistry librarian and a librarian who covers multiple subjects – likewise, supporting students at smaller institution versus a larger one.